

THE SOCIETY FOR THE ADVANCEMENT OF MANAGEMENT JOURNAL *

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Comment

STATESMANSHIP in economic affairs is more frequently mentioned than evidenced in either the thinking or the practise of executives and students of management. But statesmanship of a high order is the only way accurately to characterize the rigorous, patient and historically-minded thinking of Dr. Person as the first article in this issue exemplifies it. No living advocate of scientific management has shown a more fundamental grasp of the entire development of this movement and of the truth that thinking on this subject must move out into larger areas of consideration. Dr. Person renders a service not merely for the world of management but to every forward-looking citizen. His perspective on the necessary scope of managerial thinking continues to be among the most sane and provocative utterances of the few prophetic realists in this field.

Mr. Greenman writes out of close and continuing knowledge of the new responsibilities faced by those in supervisory positions today. He wisely emphasizes a constructive outlook on how executives can cope with existing legislation while also making it yield positive benefits in the morale of individual concerns.

There has been vast confusion in people's minds regarding the respective roles of conciliation, mediation and arbitration no less than with questions of their voluntary or compulsory use. The article by Dr. Hotchkiss analyzes this whole issue.

Sanford Thompson brings to his consideration of the concept of the optimum in industrial operation a lifetime of close and technically skillful practise in the field of management. His paper adds further emphasis to the idea that the concept of the optimum will unquestionably have increasing consideration in the thinking of top executives.

No problem concerns the implementing of efficient action in public bodies more than the enlistment and development of competent executives who will embark upon a career of public service. As a profession calling for the use of a variety of administrative skills, it is important for it that there be encouraged the opening up of larger opportunities and more occasions for personal growth. And such discussion as Mr. Melton's deserves wide support from those professionally interested in extending good management practise into every field where management is required.

SPRING CONFERENCE

April 21 and 22, 1939

STEVENS HOTEL — CHICAGO

Theme: INDUSTRY'S ADJUSTMENT TO SOCIETY

Tentative Program

Friday, April 21

12:00 Noon—*Luncheon* for Teachers of Management.

Chairman: Charles L. Jamison, Professor of Business Policy, University of Michigan.

2:30 P. M.—Panel Discussion and Round Table for Policy Determining Executives.

Chairman: W. H. Spencer, Dean, School of Business, University of Chicago.

Panel Members: Frank M. Folsom, Vice-President, Montgomery Ward and Company, Chicago.

Stanley P. Farwell, President, Business Research Corporation, Chicago.

James L. Donnelly, Executive Vice-President, Illinois Manufacturers' Association, Chicago.

7:00 P. M.—*Dinner.* "Industry's Adjustment to Present Day Problems."

Saturday, April 22

9:30 A. M.—*Chairman:* George E. Frazer, Senior Partner, Frazer & Torbett, Certified Public Accountants, Chicago.

"Profit Sharing in Industry," Arthur S. Hansen, Consulting Actuary, Chicago.

"Constant Annual Income Plans," I. R. Andrews, Director of Headquarters Personnel, Sears Roebuck & Company, Chicago.

12:00 Noon—*Luncheon.* "Work Simplification and Restriction of Output."

Chairman: F. R. Shanley, Consultant, J. L. Jacobs & Co., Chicago.

Speaker: Allan H. Mogensen, Management Consultant, New York.

2:45 P. M.—Simultaneous Round Table Conferences.

1. "Present Day Wage Policies."

Discussion Leader: John Paul Jones, General Manager, George S. May Co., Chicago.

2. "Stabilization of Employment to Meet the Needs of Unemployment Insurance."

Discussion Leader: W. E. Odom, Vice-President and General Manager, Industrial Reserves Corporation, Milwaukee.

3. "Time and Motion Study."

Discussion Leader: Theodore C. Eckstein, Supervisor of Planning Methods, Bauer & Black, Chicago.

4. "Job Analysis and Merit Rating."

Discussion Leader: A. M. Hammond, Staff Engineer, Business Research Corporation, Chicago.

The Total Situation¹

The Critical Problems of Management are Problems of Statesmanship

By H. S. PERSON

Consultant in Business Economics and Management, New York

WHAT is the reason for these new public agencies of which the Chairman has given us an impressive list and among which three of the most important have been so ably represented on the program this evening? They are examples of the efforts of a democracy—the empirical methods of a democracy which has not yet adopted the technique of planning—to adjust itself to new conditions and at the same time to alleviate the cumulative harmful influence of earlier practices which have been permitted to continue too long.

However, before developing that theme I want to congratulate the Washington Chapter for its service to participants in the Seventh International Management Congress by offering a program which supplements and compensates for a deficiency in the program of that Congress. By some accident the program of the Congress insofar as it is concerned with problems above the level of operating management, offers but a single theme—the theme of a return to a free economy and of less public interference with business. In the absence of this evening's supplementary session many of our distinguished European guests might depart from the United States with the impression that we have no comprehension of the significance of the recent economic debacle; that our Government does not recognize the need of constructive action in the face of consequent grave problems; that top management generally in the United States is still thinking in terms that bear the hall-mark of an era that has passed. The Washington Chapter is to be congratulated for seeing its opportunity and responsibility.

What we need most is a large perspective. Detailed analysis of current conditions and of trends will be most constructive if pursued in the light of such perspective. Because of the lateness of the hour what I have to offer must be in bold strokes on a large canvas.

Economic Development of the United States

There have been three major forces—the new tech-

nology, geographic circumstance, and the genius of our law—which have influenced the economic development of the United States during the past century. Each has had its independent influence, but also each has had a large part in determining the characteristics of the other two. So long as this trio of forces existed simultaneously we developed a particular type of economy with its pertinent institutions. If one were to disappear, the economy would inevitably develop other characteristics. One of them has disappeared; the economy has developed new characteristics. But business has continued to act as though all the older characteristics still prevailed, which has brought us into a confusion that will undoubtedly remain for a considerable period.

The first of these three forces is that of science, mechanics and invention. We have been made familiar with it by the term Industrial Revolution. It is an interesting historic fact, not frequently noted, that the United States began its intensive development of vast resources with the basic technology of the Industrial Revolution at hand. That technology has had enormous consequences on the peculiarly favorable terrain of the United States. It has promoted the substitution of a vast impersonal natural energy for human energy as the prime mover in production; it has permitted great increase in the size of organizations susceptible of successful technical management; it has accelerated extensive and intensive development of division of labor and roundabout processing. Altogether it has made possible enormous increase in the productive capacity of our people, and has established the technological basis of a potential economy of relative abundance.

That economy of abundance has not been realized because obsolete institutions block the adjustment of the mechanisms for distribution of social income to fit the conditions of increased productivity. The technology itself is not responsible for the present ineffectiveness of these mechanisms, but it is the principal factor that makes their revision necessary. Particularly it appears to have made the present wage system obsolete because it has eliminated the historic basis of that

¹ Address at a meeting of the Washington Chapter of The Society for the Advancement of Management, Washington, D. C., September 21, 1938.

wage system—the function of men as prime movers. Non-human natural energy is now the prime mover and man is essentially a manipulator of valves and levers. A basic element of our problem is that a new technique of distribution of social income, based on the concept of functional participation, will have to be developed.

The second great force in the development of the United States during the past century has been the force of geographic circumstance. The concept which has most influenced the interpretation of our history is that of the frontier. That concept must also play a major part in the interpretation of our economy. The United States of the past century has been dominated by frontiers of industry—successive frontiers of discovery, appropriation, exploitation and application of the new technology to vast and varied natural resources, with ready foreign and domestic markets for the products. The field of application of the new technology has been as unique and significant as has the technology itself.²

A notable economic aspect of the coincidence of these two forces is that for a century we in the United States have been concerned primarily with the conversion of free social capital to individual account, and on the basis of that experience have developed concepts of economic conduct and mechanisms for implementing them, which have validity only when there is an abundance of free social capital for conversion.

This milieu of conversion of free social capital to private account has influenced profoundly our point of view and our conduct. With the attitude of Senator Benton, who in 1928 declared that it would take "about 2000 years more to complete the sales (of public land) to the head of the Mississippi and to the foot of the Rocky Mountains," we have assumed that it would be our destiny forever to continue this appropriation of free social capital. Collectively we as a young nation were seized by the mental attitude and the habits that usually seize the young men of our experience who suddenly and unexpectedly inherit a fortune of millions.

As they usually do, we began to live on our capital. This great economy of ours has been built in part on a depreciation of natural resources. For, paradoxical as it may seem, many of the individuals in a nation can be augmenting their private stores of real or putative

capital at the same time that the nation as a whole is depleting its assets.

Like the young men, we developed the habit of confusing the appropriation of capital with the earning of income. We looked upon everything that went into individual ownership and accounts as earned income, although the greater part of it was transferal of capital. We built up exaggerated ideas of earning capacity.

And as a consequence of this illusion of earned income, we became the victims of collateral illusions. We assumed that we could safely be extravagant and wasteful. We assumed that the sky was the limit to our credit capacity. We developed paranoic concepts of valuation of assets. We permitted ourselves gradually to be smothered by a great blanket of dangerous, delicately balanced relationships of valuations, credits and debits which reflected all other illusions. These illusions were tolerable so long as we continued to work in a physical environment which permitted transferal of free social capital to individual account; but if the time should come when this environment disappeared, when we could no longer look upon capital appropriation as earned income—but let us hold this line of thought in suspense for the time being and return to it later.

The third of the trio of forces to which I am calling attention this evening is the genius of our law. We formulated our basic constitutional and legal concepts at a time when the philosophy of individualism was dominant in the western world. Hobbes and Locke in England, Rousseau and Montesquieu in France, inspired the thinking of our colonists that found expression in the Declaration of Independence and the Constitution of the United States, and guided the interpretation of the Constitution by the Supreme Court for a century. The frontier environment of the United States promoted an even more intensive development of the individualistic point of view than prevailed in Europe, where the point of view had its origin, because the sparsely-settled inhabitants of a frontier region generally are "on their own." As a consequence we built a legal structure which, more than in any other democracy, emphasized rights as contrasted with responsibilities, individual rights as contrasted with collective rights, property rights as contrasted with human rights, the sacredness of contracts as contrasted with their social consequences. The line of decisions even went so far as to give legal sanction to the concept that the incorporeal entity known as a corporation has the same rights and privi-

² See "Shaping Your Management to Meet Developing Industrial Conditions," by H. S. Person, in *Bulletin of the Taylor Society*, Vol. VII, No. 6, December, 1922.

leges as a natural person, and to the concept that certain intangibles such as good will were property in the definite accounting sense of being privileged to evaluation and listing alongside physical assets.

This particular system of law was peculiarly adapted to an economy in which the new technology was being utilized in the exploitation of a vast continent of resources, for it promoted the development of great custodial centers of capital which could apply this capital in huge blocks, and the technology called for applications of capital in huge blocks.

It also permitted a dual capitalism to develop; one, the capitalism of industry engaged in the production of commodities and services; the other, a capitalism of finance engaged in assembling, controlling and exacting a substantial price for release of the capital required by the new technology. Concerned more with monetary than with material considerations, with evidences of indebtedness and equities than with equipment and output, with capital appropriation and appreciation than with earned income, these financial institutions which were permitted to develop under our system of law were primarily responsible for the inflated mental attitudes to which I have already made reference. They made the nineteenth century and the opening decades of the present century a period of cumulative inflation. The business of the United States has been built up by inflation—not inflation by the Government directly through the stamping of coins and the printing of money, but inflation of values and credits in the conduct of commerce and industry under the sanction of law.

This appeared to be splendid—created a golden age—so long as the three forces to which I have called your attention exerted their influences simultaneously; so long as the new technology, the geographical circumstance and the system of law continued to re-enforce each the influences of the others. It created the land of magnificent opportunity and stupendous achievements so constantly referred to in the literature of a quarter to half a century ago. It created the ideal represented by the homely concept of two chickens in every pot and two cars in every garage.

Yet it all rested on the bounty of nature; on a generosity of nature which permitted us at nominal cost to dip into the great storehouse of resources to which to apply the new technology. What if nature should cease to be so generous; what if the force of geographic circumstance should undergo radical

change; what if this one of the trio of enforcing influences should cease to be a re-enforcing influence?

Such changes have occurred, and that is what makes the present a disorganizing period of readjustment. The present is not merely a phase of a typical economic cycle, but is an economic cycle that coincides with the end of one era and the beginning of another; the end of an era of appropriation to private account of free social capital and the beginning of an era where individual income must be earned and individual capital saved out of those earnings. Just compare the manner in which your grandfather got his start in life with the manner in which you realize your children must get their start in life.

This does not mean that the United States does not still have an abundance of resources. Although much depleted they are still abundant. The essential point, however, is that practically all have been appropriated; that the transfer on any large scale of free social capital to individual account has come to an end. That means a revision of our economy along new lines of which we must discover the nature, and a prolonged unstable period of discovery of its nature and adjustment of our social, political and economic institutions thereto.

The problem would have confronted us in any case, but it might have presented itself to us less abruptly and in less severe degree had it not been for the World War. Some aspects of it were being felt just before the war. It was believed that another typical depression was imminent. Then the outbreak of war among European nations stimulated and revived us by making us the source of capital and of supplies for the warring nations. It generated vast loans of capital and intense activity in the production of producer and consumer goods. When in 1917 we enlisted in the war a great emotional impulse inspired us to focus every energy on the creation of materials of war. This activity was not merely a shot in the arm; it became an economic debauch. Into one decade were telescoped several decades of normal capital investment and industrial development, and several decades of normal increase of valuations and of the inflated creditor-debtor structure. The debauch lasted a decade beyond the war. But in the end fundamental trends manifested themselves and we fell back exhausted. We were out of artificial stimuli. We had come to rest on an earned-income basis.

The Problem Today

To adjust to that basis is our problem today, tomorrow, for a decade—and even longer, perhaps.

There is a technique of getting out of depressions that had been employed consistently in the past, but has not been resorted to in connection with the present depression. And wisely, I believe. That is the technique of bankruptcy. In connection with all previous depressions inflated valuations and the inflated superstructure of creditor-debtor relations were wiped out by general bankruptcy. Immediately prior to and throughout a depression insolvencies became revealed and the forces of bankruptcy became operative, and in the course of time properties passed unencumbered and at lower valuations to new owners. As soon as there was a sufficient number of such new owners, a spontaneous revival of business activity appeared. It was a harsh mode of removing the smothering blanket of inflated valuations and creditor-debtor relations, but it worked. It worked under the geographical circumstance because every loser believed he could start over again—he had been reared in the environment of appropriation and transfer to individual account of free social capital.

But after 1929 our leaders both in Government and in business sensed instinctively—and correctly—that this mode of getting out of depressions might be dangerous—certainly politically and perhaps socially. The valuations had become extremely inflated; the network of debtor-creditor relations had come to embrace nearly every citizen of the nation. Farmers had bought new land at high values and were mortgaged to the limit; they had bought tractors and other new equipment in the face of declining farm income and had given their notes at their local banks; the small banks of the country were loaded with such paper. In urban areas new homes had been acquired on mortgages at inflated values, and otherwise unencumbered assets were tied up as security for purchases of stocks and bonds. The assets of the great banks rested on such a foundation. Nearly everybody was enmeshed one way or another. And there was no disposition to "take it lying down." It was a new experience for the United States to see farmers, the most law-abiding sector of our people, assembling in mobs to prevent sheriffs' sales. The situation was ominous.

It was decided that reliance should not be placed on the conventional mode of getting out of depression; that collective credit, i.e., Government credit, should

be utilized to shore up the tottering credit structure. In January, 1932, President Hoover signed the bill creating the Reconstruction Finance Corporation, a Government agency empowered to lend Federal funds to needy private enterprises.

This was an historic event—undoubtedly the most momentous in its consequences since the Civil War. For in creating the Reconstruction Finance Corporation the United States turned its back forever on the earlier technique of getting out of depression through universal bankruptcy. It abandoned a technique no longer tolerable for some other technique—but for what other technique? No other technique was in mind. It was done with a blind faith. Since that time, as a democracy, we have been struggling to find a substitute. And we must continue to struggle in the manner of a democracy, learning by experience and perfecting our methods, for if we do not find what we seek as a democracy we may wearily turn to totalitarianism for its undemocratic but immediately efficient technique.

Of course when the Reconstruction Finance Corporation was created it was assumed that if the endangered large financial, commercial and industrial enterprises were succored by public funds, they would become stabilized and the benefits would trickle down to lesser enterprises and to individuals. These results were not realized; the loaned funds were frozen in reserve and surplus accounts and lost their mobility. It was implicit in the Act, it was the principle of the Act, that public credit should be used to remove the danger of universal bankruptcy wherever it would have to be applied. Circumstances of a democracy have compelled extension of the application of the principle, and also have compelled alleviation of distress during the period when we are seeking correct and effective application of the principle.

We have passed from an economy characterized by the appropriation of free social capital to individual account; we have carried with us in that passage a great burden of inflated valuations and inflated creditor-debtor relations; we have abandoned as socially dangerous the technique of general bankruptcy, the clean slate and the fresh start. As a democracy we are seeking in the manner of a democracy for the road to renewed economic activity, full use of the new technology and the life of relative plenty and stability which is promised by its wise application to our abundant resources.

I suggest to our guests from other countries that, while I have been speaking to an American audience

in terms of American conditions, much of the interpretation applies equally to the situation in western Europe. I have in mind particularly the fact that as an opportunity for exploitation and the appropriation of free social capital, the colonies and the four corners of the earth have been to western Europe what the trans-Mississippi region has been to the eastern United States.

Here is a task that challenges the statesmanship of every citizen—the statesmanship of those chosen as leaders and the statesmanship of all of us as intelligent and faithful followers.

Scientific management of the individual business cannot solve the problem. It can make the impact of unstable conditions less severe for the individual business, but it cannot recreate surrounding conditions so that they are dynamically stable. If every individual plant in the United States were placed on a basis of scientific management, still the problem would not be solved, because the solution cannot come from the sum of unrelated individual acts no matter how wise each may be in respect of internal management.

Scientific management of our economy, even more than of each individual business within the economy, is where emphasis is needed under present circumstances. Then we may expect an environment for business in which scientific management of internal operations can find its full reward.

It is a responsibility of every manager and of every individual engineer to give to these problems requiring collective action among managements thought as serious as the thought he gives to problems of internal management.

Those among you who have spent years in implementing the principles of scientific management are particularly qualified to give constructive thought to regularization of the environment common to all individual managements. You have developed a technique expressing the fundamental principles of co-operative conduct planned in terms of research-determined standards of purpose and of method. Those principles are universal in their application, and are as pertinent to the problems of a society as to the problems of an individual business. You have witnessed progress in the widening of the area of their application. First in the shop; then in the plant; then in personnel work, merchandising and finally in general administration. Now you are challenged to traverse the gulf separating environmental from individual problems, and to adapt these principles to harmonizing of the sectors of the national economy just as you have adapted them to harmonizing the sectors of a private business.³

³ See "Scientific Management and Economic Planning: A Philosophy and Technique of Progressive Industrial Stabilization," by H. S. Person, in *Bulletin of the Taylor Society*, Vol. XVII, No. 6, December, 1932.

NECROLOGY

Hugo Diemer

November 18, 1870

March 3, 1939

With the sudden death on March 3 of Hugo Diemer, at the age of 68, the Society has lost one of its oldest and most faithful members. Colonel Diemer has been a member, officer, or director of both of the societies which joined to form The Society for the Advancement of Management almost continuously since they were formed. He was a charter member of The Society of Industrial Engineers and held many positions of responsibility in this Society. He joined the Taylor Society in 1912 and was a member continuously up to the time of its merger. He has since been an active member of The Society for the Advancement of Management.

In addition to his services to our Society, Colonel Diemer was known throughout the country for his work

in management. He taught one of the earliest, if not the earliest, course in Industrial Management offered at Pennsylvania State College where he was Professor of Industrial Engineering for ten years beginning in 1909. During the war he was active in industrial engineering and personnel work, being Major of the Ordinance Department in charge of the U. S. Cartridge Company in 1917 and with the Bethlehem Steel Company in 1918. He served as Personnel Superintendent with the Winchester Repeating Arms Company in 1919 and 1920, and in 1920 he accepted a position as Director of Management Courses and Personnel with the LaSalle Extension University, a position which he held until his death. He taught and lectured in many schools and

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Supervisory Problems Under the Wagner Act

By RUSSELL L. GREENMAN

McKinsey, Wellington & Company

THE ancient biblical scapegoat has its modern counterpart in industry. It is the plant supervisor. The collective errors of management are often piled on his head. His most trivial statements and actions are frequently given a public airing. His most casual remarks may find their way into the formidable documents comprising orders of the National Labor Relations Board and decisions of the federal appellate courts. In these tribunals he is often condemned as a reprehensible law breaker, albeit an innocent and ignorant one.

Both by law and administrative ruling, the supervisor is required zealously to fill the combined role of astute diplomat, impartial arbiter of human conduct, even-handed dispenser of job justice, stern defender of personal and civil rights, and, above all, a most discreet conversationalist and companion. If he fails in any particular, he may implicate his company in a variety of federal offenses.

Hence, it is in the interest of management to try to make certain that the plant supervisor has all of the attributes of the paragon that the law requires him to have. But this is not all. With management itself being put on the spot, the supervisor's superiors expect him also to be a brilliant and eloquent defender and expounder of their interests. He is supposed to be able to convince his own subordinates that the management is running the company to the mutual advantage of, and with proper concern for, the working force as well as the owners. He is likewise supposed to be able clearly and cogently to explain the company's financial position and to interpret to employees the mysterious jargon of the corporate balance sheet. All the while he must never neglect for a moment his primary duty of getting out goods of high quality at reasonable cost.

When it comes to the Wagner Act, it is not surprising that foremen have frequently been found in violation of the stringent requirements of that statute. Even among the members of the National Labor Relations Board itself there is still occasional disagreement as to how certain provisions of the Wagner Act should be construed and applied. Indeed, while the Wagner Act has been on the statute books for more than three and

a half years, there are still many important questions respecting its meaning and effect that are awaiting adjudication by the United States Supreme Court.

Unfair Labor Practices

About some basic requirements of the Wagner Act for industrial supervisors, however, there is no longer any excuse for ignorance or uncertainty. The Supreme Court has sustained the constitutional validity of the essential provisions of the statute and has upheld the Board in its interpretation and application of most of the statutory "unfair labor practices." So the management of any company within the reach of federal regulation has no justification for failing to instruct its supervisory force as to its essential obligations and rights under this law.

Just what are these rights and duties? As a quasi-judicial body the Board itself has assiduously refrained from putting out any simply-worded and elementary explanation. It insists that, like any other court, it cannot give advisory opinions. It has to deal with the specialized issues of individual cases as and when they arise. But through hundreds of decisions and through its annual report summarizing and commenting upon them, the Board has established certain well-defined principles that may serve as a guide for supervisory conduct.

Employer's Agent

To illustrate, the supervisor is always considered to be the representative of, and spokesman for, management for the purposes of the Wagner Act. In other words, he is always held to be the agent of his employer. Whatever he may say or do about any matter involving relations with unions is regarded as constituting an official statement or action of the management. To be classified as an agent of the employer, it is not essential that the supervisor actually have the power to hire or fire. He is held to be the employer's agent if he has any authority to direct the work of employees or to influence changes in their job status. Hence, the gang boss or sub-foreman is just as much subject to the re-

strictions on employers' conduct imposed by the Wagner Act as though he were the president of the company for which he works.

As a management representative, the plant supervisor must, therefore, refrain absolutely from engaging in any of the forms of conduct that might be held to constitute interference, coercion or restraint in connection with the exercise by employees of the rights of self-organization guaranteed to them by the Wagner Act. "Interference, coercion and restraint," as construed by the Board, embrace many diverse forms of supervisory conduct. For example, the Board has held a supervisor in violation of the law when, in response to a question from one of his employees, he expressed an opinion as to the unlikelihood that a union would succeed in organizing the plant. Other supervisors have been held to have committed unfair labor practices when, during the course of a strike, they called upon employees at the latter's homes to try to persuade them to return to work. For a violation of the law to be found, it is not necessary that a foreman's action actually result in preventing an employee from joining or remaining in a union. The intent is the decisive factor. If the Board reaches the conclusion that a certain course of action on the part of a supervisor was undertaken for the purpose of illegal interference, then it holds that the law has been broken.

To play perfectly safe, the supervisor should refuse to answer any questions about union affairs addressed to him by his employees. Rightly or wrongly, it seems to be assumed by the Board that the supervisor's word is law. Rightly or wrongly, it is assumed that a hint or a comment from a foreman is equivalent to a direct command.

Sometimes a word from the boss may be the same as an actual order. Perhaps just as often it is enough to send off the self-reliant employee in the opposite direction. Even so, the Board has been able to get judicial acceptance of its theory that critical statements made by supervisors about labor unions constitute unfair labor practices and are therefore illegal.

It cannot be seriously denied that the Board has found many precedents in labor history for the position it has taken regarding the limitations imposed by the Wagner Act on freedom of speech. For years superintendents and foremen in hundreds of companies have been diligent in stamping out the slightest trace of union activity. Frequently they have done this at the behest of plant management. Sometimes they have done it on their own initiative because of natural dis-

taste for any challenge to their own authority or because of unfortunate personal experiences with labor organizations. What their reasons may have been in the past is no longer of real consequence. The fact is that the Wagner Act makes it patently illegal for any person having supervisory authority to manifest any attitude other than strict neutrality respecting labor unions.

Company Unions

One supervisory problem arising under the Wagner Act is usually not of the supervisor's own making. Rarely, if ever, has the supervisory force been acting on its own volition in trying to induce employees to form a new labor organization where none existed before. Whatever merit there may be to company unions, or even to company-sponsored unions, this should ordinarily be of little concern to the plant supervisor. These are problems for top management. And top management has almost invariably been responsible for the numerous Wagner Act cases involving charges of dominating or supporting labor organizations. In the numerous cases where foremen have been held by the Board to have taken the leadership in organizing a company union they have ordinarily been following the direction of their own superiors. Now that the illegality of any form of encouragement or support for an independent or company union has been decisively established, it should no longer be at all hard for plant supervisors completely to obey the mandate of the law prohibiting them from fostering or aiding such an organization.

To be sure, the Wagner Act does not prohibit supervisors from joining unions. Nor does it ban company unions or any other kinds of labor organizations. What the law does prohibit is any form of supervisory interference with the rank-and-file employees' own freedom of choice in the selection of their own representatives. Hence, a foreman who recruits members for the labor organization to which he himself belongs is almost certain to be declared to have committed an unfair labor practice.

The Wagner Act does not differentiate between company unions and other kinds of labor organizations in those of its provisions that make illegal management support or interference with selection of representatives and the conduct of union activities. Consequently, it is just as much a violation of the law for a supervisor to give aid and comfort to an affiliate of the A.F. of L. or of the C.I.O. as it is for him to give encouragement to a company union. Hence the super-

visor must watch his step when organizers for either of the two national labor groups are trying to recruit members among his subordinates. He must always manifest an attitude of passive neutrality. This does not mean that he must tolerate union activity in the shop. Quite the contrary. If a company has rules prohibiting any form of outside activity in the plant and on company's time, he has the right and the duty to enforce these rules vigorously against all employees. But, if he allows members of one organization to conduct union affairs while on the job, he must extend the same privileges to members of any other labor organization in order to comply with the requirements of the law.

Discrimination

The most acute supervisory problems involving the Wagner Act arise in companies where the employees are already unionized or where two rival unions are contesting for recognition. In such situations the supervisor must lean over backwards in order to avoid being accused of illegal discrimination. It is Unfair Labor Practice No. 3 that has produced by far the most grief for foremen and other supervisors who actually direct the performance of employees on their jobs. This is the unfair labor practice (Section 8-3 of the Act) that makes it illegal for an employer (or his agent) to encourage or discourage membership in a labor organization by discrimination in regard to hire or tenure of employment or any term or condition of employment.

The limitations on supervisory authority imposed by Unfair Labor Practice No. 3 are so sweeping in character that it has taken hundreds of Board decisions to determine the extent of their application. While it may be hard for some employers to believe, in scores of these decisions the Board has exonerated plant supervisors of any illegal intent or action in firing union employees, in laying them off, in demoting them, or in using other disciplinary measures. On the other hand, the Board has found employers to have discriminated illegally against thousands of employees because of their union connections or activity. To ascertain the principles upon which the Board bases its decisions, it is necessary closely to scrutinize the facts in individual cases.

Supervisors' Motives Tested

If there be any one guiding principle used by the Board in determining the presence or absence of illegal discrimination it is, in substance, that the motive of the

supervisor is the certain test of the legality or illegality of his conduct. As the Supreme Court declared some nine years ago: "Motive is a persuasive interpreter of equivocal conduct." When a union man is discharged or demoted at the same time a non-union man is hired or advanced to a better job, and a charge of illegal discrimination is filed, the Board always seeks to determine the real reason behind these changes in the employees' status. The reasons do not necessarily have to be good ones. The supervisor, like all other human beings, may legally make errors of judgment. There is just one reason which is illegal, i.e., an intent to discourage or encourage union membership or activity through the means of preferential treatment of one employee or discriminatory treatment of another.

Supervisors may move with impunity to purge their working forces of any persons who are incompetent, dishonest, insubordinate, or lazy, as long as in so doing they are not violating the terms of a union agreement to which their companies may be bound. If, however, they fail to give identical treatment to non-union employees who have comparable shortcomings, they are likely to find themselves haled before the Labor Relations Board and held in violation of the law. The Board invariably wants to know why worker "A," a man with fifteen years' continuous service and an excellent record of productivity, was fired a month after he joined the union while worker "B," a man with shorter service and a poorer performance record was put in "A's" place. Unless the supervisor can give a convincing answer and support it with concrete evidence, he will probably be found guilty of an unfair labor practice.

To protect themselves and their companies against ill-founded charges and adverse decisions of the Board, it is incumbent upon supervisors not only to have a proper and legal reason for everything they do affecting the tenure of employment of union employees, but to tell the men concerned just what the reasons are. It is also desirable to maintain written records respecting each employee's performance and conduct on the job. It is not enough carefully to note minor errors in a union man's work for a few weeks before a foreman expects to discharge him. That in itself would be indicative of an intent to discriminate illegally against the man. The Board would want to know why similar records had not been kept for all other employees in the department.

The foreman himself cannot be expected to keep constantly informed regarding all rulings and orders of

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Optimum Productivity in the Workshop

By SANFORD E. THOMPSON

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Foreword

THE Conference was attended by representatives of manufacturing plants of Great Britain ranging in size from small to those employing many thousands of workmen and by prominent Government officials interested in labor relations.

The broad scope of the discussion is indicated by the title of the Conference: "Optimum Productivity in Modern Industry. A Survey by the Conference of the conditions of best possible output having regard both to technological and human considerations."

Papers or "lectures" were presented covering the fields of Administration, Industrial Relations, Workshop Organization and Social Implications. As a special feature also were the eight Round Table Groups, ranging from eight to fifteen delegates, meeting between and after regular sessions with animated discussions of the various features involving organized labor, personnel, motion and time study, methods of remuneration, production planning, and workshop organization. The last-named group of fifteen, for example, led by Mr. Thompson, included Directors, Works Managers, Accountants, Production Executives, Salesmen, and a Labor Union Representative, Secretary of the Irish Women Workers' Union.

A major contribution to the Conference was the paper forwarded to the Conference by Miss Mary van Kleeck, Director of Russel Sage Foundation, Department of Industrial Studies, and Associate Director of the International Institute of Industrial Relations, on "Social Implications of Optimum Productivity" with an Introduction by Miss van Kleeck and Miss Mary L. Fledderus, Director of the I.R.I., the Hague.

Mr. Thompson's paper follows:

America can point to outstanding initial achievements in scientific management in industry largely through the initiative of my friend, the late Frederick W. Taylor. On the other hand we are forced to acknowledge

that one of the fundamental causes of the recent business catastrophes in America has been due to the neglect of the extension of the scientific method into industry as a whole and into finance and government.

Necessity for Optimum Research

As it relates specifically to the work shop, "optimum productivity" is the maximum output produced with the best equipment, the best methods, under healthful surroundings, and without progressive fatigue.

The conclusion was reached by the 1931 Amsterdam Congress of the International Industrial Relations Institute that our central economic problem is "The necessity for the planned adjustment of productive capacity and standards of living." In relating our present subject to this conclusion I can assume the recognition of the premise that increasing unit productivity is the prime essential in raising the standards of living. Optimum productivity therefore when taken in its broad scope is one of the most vital factors for consideration in the present era.

Today we concentrate on the problem of productivity in the individual plants or units of an industry, not as a national problem nor even as affecting an industry as a whole. Here is where must start the basic factors of productivity and their relation to the human factor.

I propose to present a brief analysis of the features involved in productivity in the shop and follow this with illustrations drawn from experiences in practice in American industry, and then finally to present briefly a few suggestions for attack upon the problem. I shall give these cases from experience not at all for the purpose of extolling scientific management—in fact the cases themselves represent simply fragments of the complete structure—but because in the scientific development of production and distribution in any organization the various features mentioned appear in

greater or less degree, while at the same time the vast field for further development is indicated.

The man or woman unassociated with industrial processes and methods is apt to think of the worker as an automaton who is told by his employer to do a routine job of fixed extent; the employer or foreman is simply a task master to compel maximum (not optimum) speed of performance regardless of the worker's ability or initiative.

Take, for example, the simple operation of digging a trench. One may say that all a man has to do is to put in his shovel and throw out the dirt. All the foreman has to do is to yell "deeper, deeper." But for the largest production with a minimum of fatigue—for optimum productivity—it is necessary in trench digging to engage men fitted for the work; to determine the implements to use; to choose the type of tool, say the kind and size of shovel and pick adapted to the particular soil and depth; to manipulate this in the easiest manner; to know the amount of earth per shovelful that is easiest to handle; to provide space above for the earth; to lay out the work for each man; to determine the number of men to match the length of trench desired; to plan the work ahead to avoid stoppage; to avoid excessive exertion due to an over zealous foreman; to permit or insist upon rest when needed; and, in fact, to carry on the various functions which agree surprisingly with those in a plant making complicated products.

After a consideration of the various types of operations which are incident to all classes of work it becomes clear that it is possible to analyze and even to tabulate the factors that are essential in well-managed industry. The degree of their utilization, while somewhat dependent upon the nature of the work, often is indicative of the extent of the approach to scientific management or to optimum productivity, terms almost synonymous in the matters under consideration.

Essentials for Optimum Productivity in the Shop

The essentials of scientific management may be classified under the general grouping of research; standardization; control and co-operation. From the production standpoint they may be analyzed more directly in terms of the operations involved.

Some of the factors then that enter into the requirements for optimum productivity involve:

Plant and equipment:

1. Layout of plant for best results.

2. Machinery and equipment designed to produce work in maximum quantity and uniformity of quality at minimum effort.

3. Driving mechanism to maintain required machine speeds without cessation.

4. Power adapted to the needs of the particular shop and generated or purchased at lowest cost consistent with proper labor conditions.

5. Tools of proper design and composition to perform the work with greatest expedition and ease.

Materials:

6. Research into types of materials best adapted for the products.

7. Purchase of the materials best designed for use from the standpoint of utility, quality and cost.

8. Tests of materials to check conformity to specifications.

9. Control of inventories of materials in volume of each item to co-ordinate capital expenditures and manufacturing needs.

10. Inventory records to show materials on hand and length of time required for replacement.

Operating standards:

11. Best method of performing each operation determined by judgment and research and studies.

12. Standard time of performance of each operation from unit time study and past records, with due regard to fatigue and quality of product.

13. Standards of quality.

14. Standards of allowable waste or seconds.

15. Adaptation of details of the equipment for productivity and ease of performance.

16. Arrangement of machines and work places for most efficient work and for ease and convenience of the workers.

17. Training of the operatives.

18. Budgeting of indirect labor to guide the foreman in control of miscellaneous labor and maintenance.

19. Co-operation of the workers in all these factors.

Planning and control:

20. Master planning of the manufacturing orders which go to the shop to conform to the shop equipment and personnel, so as to avoid congestion.

21. Utilization of the time standards in this master planning.

22. Planning of production throughout the year to better equalize production.

23. Planning the work to individual machines and workers in each department.

24. Control of materials in process to allocate in proper volume so as to avoid lost time and permit most economical production.

Organization:

25. Arrangement of executive control for most efficient operation and satisfactory labor relations.

26. Utilization of functional control where useful.

27. Provision for hiring workers best fitted in all respects for all jobs to be performed.

28. Methods of layoff and discharge which are fair to both workers and management.

29. Provision for sickness, unemployment and old age.

Records:

30. Keeping of records of production for the benefit of the management and of the workers and of the sales division.

31. Cost accounting to provide information to the management and to give the sales division a knowledge of standard costs of each kind of product.

Operating conditions:

32. Provisions for convenience and ease in operating the machines or handling the work and providing comfortable seats if needed.

33. Provision of proper light and heat.

34. Provision of proper toilet facilities, rest rooms, and first aid.

Wages and incentives:

35. Determination of proper wage scales with cooperation of the workers.

36. Plans of payment best adapted to each kind of work.

37. Suitable rewards for productivity in volume and quality.

Sales:

38. Research in new products.

39. Research in modification of products for saleability and economy of manufacture.

40. Research in markets and outlets.

41. Allocation of territory and personnel.

42. Sales quotas for each territory.

43. Methods of paying sales expenses—fair and economical.

44. Development of initiative and satisfaction of

salesmen through rewards for selling the desired quantities of each item.

45. Pricing for ultimate returns rather than immediate sales.

Now all of this seems like a formidable order, but I do not know of any plant in any industry that, to a greater or less degree, does not involve in its operation and management, a majority of the factors I have outlined. But, notwithstanding this, in a vast number of discussions, at least in America, and frequently predominating, in volume of talk, all of the others, is the emphasis upon the one factor of setting wage incentives. Yet most of the factors enumerated above include elements that must positively be considered if fair returns are to be paid, and a fair day's work to be accomplished. For scientific management, or optimum productivity, it is absurd to consider only one phase of this vast problem.

Cases

The vital importance of the broad consideration indicated in the tabulation above can be illustrated best by the citation of cases in America—or rather incidents selected from cases—where the scientific method was in vogue.

We might well illustrate the breadth of the field, even in the shop alone, by describing the early development at the Midvale Steel Co. in the 1880's where Frederick W. Taylor, with no precedents to go on, actually worked out the fundamentals of the factors enumerated above. I know this, not simply by hearsay and literature, but from an examination of the plant with Mr. Taylor in 1893. He started with the aim of adjusting the rewards to the workers to give them fair remuneration for a good day's work. To do this he found it essential to develop the machines; to obtain uniform steel; to provide the proper tools; to re-equip the belting; to plan the work; to establish feeds and speeds; to standardize the operations; to time study the elements; to establish a wage plan; and so on.

However, I can speak with more authority if I limit the cases to those with which our own organization, The Thompson & Lichtner Co. Inc., has been actually associated. I repeat that these are selected simply to present a background to the problem we are discussing so that we can better frame a plan for research.

Development in a Paper Mill

In an early development about twenty-five years ago in a large paper and pulp mill making high grade paper,

work was started in the department where the paper was given its finishing processes of cutting, plating, inspecting, and so on. Time studies were begun and a planning department organized, but it was found that the paper was not always of a uniform quality and that quantities to be made were uncontrolled. One thing led to another. The manufacture of the raw material, sulphite pulp, and the treatment of the rags had to be standardized. The processes of making the paper, such as beating and bleaching and machining were systematized. Uniformity of quality was regulated. Temporary stoppages of the paper machines were reduced. Control of inventories was established. New cost methods were introduced. A plan of incentives based upon unit time study was developed using different plans in different departments, in all cases introducing quality as a prime factor. Perhaps most important of all was the training of the executives in the management to the scientific methods of handling their various problems, including their labor relations, and of controlling sales.

Resulting from these combined efforts of the plant management and the management engineers, the company in 1916 made a profit of half a million dollars, although when work was started it was in the hands of the banks because of failure to pay interest on their loans.

Yet with all this wonderful development the management neglected to apply the scientific method to two important phases, namely, purchasing and plant capacity. They became so optimistic over the results attained that they expanded the plant too greatly and purchased wood land to excess. This resulted in a period of recession and then a final building up.

Standardization vs. Ordinary Rate Setting

To illustrate the essentials of scientific study of an operation to approach optimum productivity, we may take an operation in practice of rewinding coated paper. The paper came in rolls from the coating machine, but because of occasional flaws and other variations it had to be rewound in rolls for shipment. The operation of rewinding had been put on to piece work sometime previously, with a resulting increase of 50 per cent in production. But it did not work. Because of variations in the paper and of other conditions the quality was reduced, and the earnings of the workers varied so from day to day that they very properly objected and the "wage" system was discarded.

When the job was analyzed more scientifically, it was found necessary, in order to approach optimum productivity, to attack the problem from the "method" standpoint. Time studies were made almost at the beginning, not only for the purpose of ultimately developing unit standard times, but even more to determine, by analysis of these times, the changes in methods and equipment necessary, and the delays and resting time needed.

As a result an appreciable gain in output was attained by small changes in the machine, and other gains by changes in method. These changes while increasing the volume of production actually lightened the work of the girl operators. The type of winding shaft on which the paper was reeled was redesigned; the method of handling the rolls improved; variable speed drive was introduced so that the paper itself came over the machine always at the same rate of speed; chairs of convenient shape were arranged for the girls; methods of pasting the ends of the rolls together were improved; and finally an incentive was worked out which rewarded the girls not only for quantity production but on a basis of the number of splices required and the quality of their work. The output was increased about 160 per cent with less strain on the operator than before. The work required several months to complete so that the surplus labor could be transferred to other jobs in the plant.

Co-operation of Manufacturers and Union

One of the earliest experiences in union-management co-operation that set the example for others of similar nature which followed later, was in New York City in 1916. By a joint agreement between the Dress Manufacturers Association and the International Ladies Garment Workers Union, with the advice of the late Robert G. Valentine, Co-ordinator, a test shop was set up under the direction of the Thompson & Lichtner Co., Engineers, to establish time standards of production. Time studies were made by union officials whom we trained, and unit times for each operation were set up. By recombining the unit times to fit each case it was possible to determine in advance the normal time required to make a blouse of any desired style and material. Utilized in cases of disagreement in the various blouse shops, the facts when presented resulted in the settling of disputes, sometimes the union and sometimes the company making good in money payments to correct the inequality.

Two important conclusions we may draw from this work:

First, by time study it was possible to establish unit times for all operations so that the standard time to make a garment of any style and material could be figured accurately by analyzing the elements of making the garment and applying the unit times built up by time study to determine a standard time for the complete garment.

Second, on questions of fact, the manufacturers and workers found no difficulty in reaching an agreement. The problem of piece prices then resolved itself into the question of the hourly earnings it was desired to use to translate standard times into piece prices. There was no haggling on individual piece prices, since the relation between them was determined from data brought out by factual time study.

Resting

The classic example of the effect on productivity of scheduled resting coupled with scientific procedure, is in the handling of pig iron at the Bethlehem Steel Company about 1900, where Taylor found it possible to increase output from 12½ tons per day to 47 tons per day per man without overworking the man. The actual working time under load was only 42 per cent of the day.

Still earlier than this, at the Simonds Rolling Machine Company in Fitchburg, Mass., in 1894, the writer, associated with Taylor, found that the girls inspecting bicycle ball bearings could accomplish as much in 8½ hours per day as in 10½ hours.

Furthermore, it was found that four rest periods during the day, two in the forenoon and two in the afternoon, on this exacting type of work of inspecting not only relieved the strain upon the workers, who were on piece work, but also tended to increase daily production.

We have found, as have other researchers, that not only the amount of rest but the frequency, must be determined for every type of work. In the inspection referred to, definite rest periods were found satisfactory. On the other hand, analysis of the operations of sawing and shovelling showed that the men working with an incentive rested almost automatically at frequent intervals, every few minutes in fact.

Increasing Productivity by Planning

A large percentage of the operations of making shoes in America, often 90 per cent or 95 per cent is on piece

work. Yet the rates are scarcely ever set scientifically and all too often are a matter of bargaining between the manufacturer and the union. Now bargaining is legitimate in fixing normal earnings. It is entirely out of place for determination of time required for performing a piece of work. Frequently rates are as much as 50 per cent in error and only balanced by undue speeding up or slowing down or leaving early in the afternoon.

Partly because of this lack of knowledge of the correct unit times the planning of the work in the shoe factory is absurd. "Day sheets" or lists of the number of pairs of shoes of each style to be made in a day are made out in the office. These day sheets call for a uniform number of shoes each day, say 1,500 pairs in a shop of moderate size, regardless of the style. Yet one style of shoe in the operation of fancy stitching may require by actual test 30 times as long as another style. Certain other operations also vary appreciably.

In preparing the day sheet it was found possible, after having established times of the operations by time study, to utilize the standard times, not only for fixing piece work prices, but also to find the time required in the shop for each lot of each style, and to allocate the shoes accordingly. Also, and this is a feature too often entirely overlooked, it was possible to plan in advance the personnel required. This planning resulted then in evening up the work to the different operators; giving all operators a fair deal; reducing stress; increasing production by reducing lost time and waiting for work; preventing congestion; and permitting the filling of orders on time.

Expanding Construction Activities

It is recognized generally that one of the chief impediments in the enlargement of construction activity is the high cost of building. Progress has been made in simplified design, in selection of materials, and, in some lines, in improved control, but the question of optimum productivity is scarcely ever considered. In fact rarely is the unit volume of work performed even known, much less standardized. Yet it has been found possible to standardize the operation in construction as well as in manufacturing industries. In house building, for example, comparing houses built by usual methods and those under scientific management—which involved planning the work and determining and using standard times of performance—carpentry labor costs were reduced on different operations from 20 per cent to 40

per cent, while at the same time the carpenters received from 15 to 20 per cent higher pay.

In a typical small frame house the cost of labor on the site is apt to represent nearly 40 per cent of the total cost, exclusive of land. The saving on entire cost, when this ratio holds is thus from 8 per cent to 16 per cent.

Researches in Optimum Productivity

Researches in optimum productivity in industry can be carried on to produce far reaching results from the standpoint of both management and labor, and with due co-operation on the part of each. The results should tend to increase unit production, to increase returns to labor, to lower prices to the consumer and finally, through these means, to raise the standard of living. Ultimate accomplishment of course must be coupled with treatment of the broader economic problems involving total production and more uniform production throughout the year and throughout the business cycle.

Confining ourselves, now, to the shop, it may be in order to express a few personal thoughts as to the method of approach that may be made to this problem. Whether or not this is the approach planned by its investigators already starting work for the Russel Sage Foundation or whether it is the best plan to follow, it at least presents opportunity for criticism and modification as the working plans are developed.

In the first place it is evident, that while general laws may be developed finally, the research at first should be concentrated in one or more specific industries. Even here, from a superficial viewpoint, the objection may be raised that the operations and methods in every plant even in the same industry are "different." While this is true, I am interested more in the establishment of procedures and of methods than I am in the determination of detailed facts which in the development of productivity in an individual plant are so vital.

For example, in the textile industry the actual productivity of a loom will vary with the type of loom; the extent of automatic operation; the speed; the character of the yarn; the quality of the yarn; the nature of the cloth woven; the experience of the weaver; the working conditions; the planning of the work and so on. No two plants and no two weaving rooms and no two periods of operation in the same weaving room may be exactly alike. By methods of unit time study, which permit combinations to fit different conditions, certain of the variables may be eliminated but radical differences will remain.

But when we consider the methods of work—and the best methods must be arrived at by time or motion studies—it is possible to establish, not only principles of practice, but procedures which are adapted to similar departments in the same industry.

Thus methods of time study and job analysis for each class of work can be standardized. Best methods of handling the bobbins can be considered. Laws of fatigue can be framed, and the nature of rest periods determined for different types of work. Planning procedure can be standardized in principle. Inventory control methods can be worked out. Methods of co-ordination between sales and production and between grey and finished goods can be systematized. Methods of repairing and adjusting machinery can be established. Plans of rewarding labor can be worked out for each department. Working conditions can be studied, and so on. Note, furthermore, that all of these factors affect directly, not only the productivity, but also the ease and satisfaction with which the work is performed.

It would appear that the field, not only for local studies, but for international research, with comparison of results as the work proceeds, should be of inestimable benefit to all concerned.

The object of this discussion has been to bring out, in very fragmentary and unco-ordinated fashion, points which may provide a starting point for further consideration and discussion of optimum productivity as practiced at present, and the opportunity in industry for further progress. Especially it is desired that it may point the way to a treatment broader in scope than has heretofore been possible due to the limited knowledge, and to more universal use of fundamental principles.

Discussion

In the discussion following presentation of the paper various questions were propounded for Mr. Thompson to answer. The topics, all germane to the subject matter of the paper, included such problems as: training of workers in the shop vs. a special school; rest periods; music in industry; training of foremen; reaction to wage systems in time of depression; utilization of elementary times in garment work; effect of the five-day week in America; the influence of orderliness and flow of work; standardization of parts and of products; correlation of shop capacity with demand; relation of scientific management and technological improvement to the unemployment problem; progress of psychotechnical application in American industry.

Arbitration—An Analysis

By WILLARD E. HOTCHKISS

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ARBITRATION is a genus of which there are many species, and the species occur in varied settings. Anyone, who has lived in a community in which a street railway, a taxi, or an elevator strike has tied up traffic, naturally thinks of arbitration as a means of escape when crises jeopardize public convenience or safety. When such crises are met through arbitration, opportunity is seldom offered for arbitrators to study thoroughly the background of issues which divide the parties, and the atmosphere of proceedings is likely to be charged with politics. Public officials, even judges, who become arbitrators under such circumstances, find it difficult not to respond to pressures which do not always reflect the merits of the case; and if pressures from the two sides are fairly even, effort is sometimes made to split the difference between their respective claims.

Many difficult issues have been settled, or at least postponed, by this type of arbitration, to the great relief of citizens who suffered from interruption of essential services. However, beyond confirming public assurance that industrial emergencies bring with them a means of escape, permanent benefits from such *ad hoc* adjustments are limited; they represent the most elementary phase of arbitration.

A more advanced phase is a situation in which employers and employees in an industry or trade recognize in advance the probability of conflicts which they will be unable to resolve and set up proceedings for handling them which include either designation of an arbitrator or board, or stipulation of methods to be followed in setting up impartial machinery. One form of constituting arbitration procedure in advance is embodied in provisions by which the parties each agree to designate one member of a board and delegate to the two persons so chosen, the task of selecting a third member. This procedure has two serious defects. The first lies in the fact that selection of the man who has the deciding vote is left to be performed in the stress of conflict. The second defect is that, although the three persons nominally constitute a board, each of the members designated by the parties usually votes in favor of his own

side, with the result that the so-called board breaks down into two advocates and one arbitrator. In most circumstances, better results are secured by having the persons who act as advocates, so designated. Selection of arbitrators in advance is susceptible of infinite variation but seldom occurs except in connection with trade agreements in which the jurisdiction of the arbitrator or board is specifically limited.

Whatever the jurisdiction of impartial machinery, its value depends largely upon the attitude of the parties, the extent to which their representatives can speak for the rank and file, and the circumstances which either help or hinder arbitrators in making thorough inquiry into the issues involved. A major source of usefulness lies in the aid which arbitrators may give the parties in narrowing the area of their disagreements. It is notable that in those industries in which voluntary arbitration has functioned most successfully and over the longest periods of time, the volume of business transacted by arbitrators tends to diminish as procedures mature, and as representatives of the parties become more familiar with their rights and obligations under agreements. On the other hand, when once the arbitration principle finds permanent embodiment in the labor agreements of an industry, trade, or concern, arbitrators participate in many conferences through which the number and magnitude of issues which go to arbitration may be greatly reduced.

Regular contacts which arbitrators who serve continuously have with employers and employees, put them in position to render service which, if wisely performed, tends to check extreme action. Basic conditions, such as wages, hours, and working conditions, are seldom left to the determination of third parties, except by specific mutual consent. However, availability of persons to whom both employers and employees have agreed in advance to refer particular issues is frequently helpful in respect to more basic issues. The same persons who serve as arbitrators with limited jurisdiction under an agreement may become mediators in respect to issues which lie beyond their jurisdiction as arbitrators.

The Arbitrator's Position

Arbitration has been referred to as constituting a type of industrial judiciary. Careful scrutiny of the actual work performed by arbitration boards, whatever their degree of permanence, reveals that their work is frequently more administrative than judicial. It is not permissible for arbitrators to change the terms of agreements under which they operate, nor to go beyond their scope. However, labor agreements, like statutes, are at many points susceptible of differing interpretations; and when dispute concerning the meaning of particular language in an agreement arises, it is essential to combine wisdom with correct principles of interpretation in resolving the issue. Such a combination may easily lead to one kind of decision at a given time and under given circumstances, and to another kind under different circumstances. In other words, arbitrators look both to the agreements under which they function and to the probable consequences of decisions which they may make. Legalistic interpretations are sadly out of place in labor issues. This point appears sufficiently obvious, but specific examples will clarify it.

Collective bargaining agreements properly aim to safeguard the position of union representatives in the discharge of their duties, but no agreement can cover in specific terms all of the mutual rights and obligations of union representatives and the supervisory personnel of the shops to which they are assigned. Disputes which arise under such provisions raise questions such as these: (1) Has the union representative exceeded his authority and acted in such a way as to destroy the necessary discipline of the shop? (2) Have members of the supervisory personnel been antagonistic and tried to prevent representatives from performing proper union duties?

In a recent decision, discharge of a union representative was upheld substantially on the following grounds: While the subordinate representatives of management may have been unduly officious and regarded proper union activity as an intrusion, responsible officers of the company had never countenanced restraints upon union representatives, and a commendable spirit of co-operation was evidenced by officials, both of the corporation and of the union. The ground for sustaining the discharge in this case was repeated infraction of rules, improper language, and a failure to utilize the initial adjustment processes in handling cases. This particular decision was coupled with notice that discharge of union representatives would be sustained only in clear

cases, and a warning that no attempt to embarrass such representatives in the performance of their duties could be tolerated under the agreement.

In contrast to this type of case, one which involves merely review of discipline administered to a regular employe usually hinges on questions of fact which give a basis of judgment, (1) concerning the acts which occasioned the discipline, (2) concerning the appropriateness of the particular discipline. In other words, such cases become much more matters of judgment than of legal interpretation.

A type of case which is of peculiar importance in times of inadequate employment has to do with layoff. It is customary for agreements to contain some sort of seniority provision which guarantees to the employer the right to administer layoff so as to retain properly qualified personnel for doing the work of the plant, and to insure that qualified employes shall be given preference both in layoff and in recall over employes whose seniority is less.

Cases under such provisions often involve question concerning the departments to which seniority rosters apply, and in some cases the meaning of the word "department" as found in a specific agreement. About the only useful function which an arbitrator can perform in this kind of case is to lay down general principles of interpretation as a guide in administering seniority. It would be extremely difficult for a plant to function properly if routine seniority provisions had to be administered by an outsider.

Another type of case links the question of employment to technology. Practically all of the agreements in mass production industries, which have recently become unionized, recognize the right of the employer to make technical improvements. On the other hand, the rights of the workers who may be affected by such improvements are safeguarded to the extent that the adjustments to technical change become subjects of conference and co-operation. In other words, the employer's freedom of action is somewhat tempered by the union's right to conference and the obligation of both parties to co-operate in working out a satisfactory solution of problems.

Although issues of this kind may not be specifically subjects of arbitration, agreements frequently contain provisions under which workers' representatives may bring them to arbitration if they believe that the employer is proceeding more drastically than the agreement contemplated. In disputes that have to do with administrative aspects of agreements, such as layoff and

technical changes, an arbitrator sometimes occupies a sort of "no man's land" on the fringes of the agreement, and his usefulness then depends upon the contribution he can make to the tolerance and good temper with which the parties meet the issue.

Experience in the Railroads

Use of impartial machinery under collective bargaining agreements has perhaps its most comprehensive embodiment in the railroads. Under federal legislation, culminating in the Railway Labor Act of 1934 which was passed with the approval of railway unions, arbitration in respect to application and interpretation of agreements is in force on all the railroads of the country. The compulsory features of this Act do not cover making new agreements. However, parallel with arbitration machinery for settling issues under agreements already in force, the National Mediation Board was created to serve as a channel of communication between the carriers and the railway unions and to assist them in making and changing their agreements. The availability of a disinterested agency which maintains contacts with both sides minimizes the danger of crises in negotiations and aids in meeting these crises when they occur. The National Mediation Board is appointed by the President of the United States and sits permanently in Washington.

In case the carriers and the unions cannot agree upon a basic issue, and mediation does not succeed in bringing them together, the Railway Labor Act provides that service shall not be interrupted pending full consideration and report on the issues by a special board appointed by the President of the United States. No strike can legally occur in respect to such issues until after the President's board has published its findings. An example of the operation of this provision occurred in respect to the recent demand of the carriers for a 15 per cent reduction in wages. This issue was carried through mediation without the parties being able to agree; whereupon the President appointed a special board to study and report upon the issue. After this board had found that the requested reduction in wages was ill-advised, the carriers withdrew the demand.

The body to which are referred railroad issues that arise under agreements already in force is known as the National Railroad Adjustment Board. Its several divisions, each covering a group of railway services, are made up respectively of an equal number of carrier and labor members. The labor members represent

those railway services which are covered by the particular division. The National Railroad Adjustment Board sits continuously in Chicago and hears cases from all of the railroads of the country.

The regular members of the Board, equally representative of carriers and labor, settle as many issues as possible without intervention of an outside person. However, the Railway Labor Act provides that when cases arise which the labor members and the carrier members of a division cannot settle, the National Mediation Board shall appoint an impartial referee to sit as a member of the division and that a majority vote of the Board thus constituted shall decide the issue. Since the Railway Labor Act of 1934 was enacted, hundreds of cases have been disposed of by agreement between the carrier members and the labor members of the several divisions, and other hundreds have been decided by majority vote of the Board with a referee sitting as a member.

Ability of carrier and labor members to agree without the aid of a referee has varied considerably between the several divisions of the Board. The theory of the Act is that, although carrier members and labor members are respectively representatives of opposing sides, their detachment from local conditions enables them to view controversies more objectively than is possible for men on the particular property. As was expected, this has resulted in many decisions without the aid of a referee.

Cases decided by referees have served to clarify numerous provisions of railway labor agreements under which they arose. Most of the issues are sharply fought, and decisions are freely criticized and sometimes openly challenged. In exceptional cases, one party or the other may ask for a re-hearing or for clarification of some particular point in a decision, but when decisions are promulgated they are final and conclusive as between the parties, subject only to appeal to the courts.

The Railway Labor Act has been held up as a model for other industries, especially for the maritime industry, the presumption being that the success which it has achieved in forestalling interruption of service on the railways could be carried over to another industry. Such an assumption has merit, but it should be recognized that the Railway Labor Act of 1934 is an evolution from previous laws and is predicated upon a long history of orderly relations under collective bargaining agreements. Arbitration machinery on the railroads is largely a result of self-discipline by the

carriers and the workers. As an instrument of adjustment, it is rather an expression of this discipline than a cause of it.

Opposition to Compulsory Arbitration

The sharp distinction in the Railway Labor Act between procedures for making agreements on the one hand, and for applying and interpreting them on the other, reflects the strong opposition which until recently labor has shown for compulsory arbitration. The willingness of railway labor to grant compulsory powers to the National Railroad Adjustment Board is predicated upon the definite exclusion from arbitration of basic issues which have to be met when agreements are made or changed. Although there have been strong advocates of compulsory arbitration in enterprises which are affected with the public interest, unions and, to a large extent, employers have been traditionally opposed to it. There has never been any widespread public sentiment in favor of making arbitration an instrument of general application for fixing wages, hours, and working conditions.

In the years following the World War, when industrial conditions were disturbed and basic industries were interrupted, the idea of limited compulsory arbitration appeared to some persons as a necessary escape

from what they considered intolerable conditions. This view was expressed in the industrial commissions appointed by President Wilson in 1919 and in the deliberations of the United States Coal Commissions in 1923. However, even the most conservative opinion recognizes the right to strike which to a man without property is fundamental. Abridgment of that right, except by the voluntary act of the worker himself, results in forced labor. Moreover, when once a strike has been made illegal, the joining of two or more persons to promote a strike becomes conspiracy—in other words a crime. Such a situation would be obviously incompatible with free institutions, however unfortunately the right to strike may at times be exercised. In these circumstances, provision for compulsory procedures, for impartial study and for complete publicity concerning issues involved in industrial conflicts is about as far as compulsory adjustment machinery can safely go.

Voluntary arbitration, on the other hand, is eminently a democratic process which, under one form or another, has for many years been utilized in several industries, but it has not in any sense become standard practice under collective bargaining agreements. In competent hands it serves as an effective supplement to day-to-day relationships under such agreements and performs a highly constructive function.

Supervisory Problems Under the Wagner Act

(Continued from page 38)

the Board. That is virtually a full-time task itself. But every company subject to the Wagner Act should have in its personnel department or on its legal staff at least one competent person who can pass on to the management and to the individual supervisors new Board interpretations respecting their rights and obligations.

It should not be necessary for a foreman to have to consult the industrial relations manager or company attorney every time he hires a new man or discharges an employe for what he considers to be a proper cause. The supervisor always knows what his own intent is. If in his own mind he realizes that a given action was motivated by a desire to discourage union activity or to

advance the cause of one labor organization against another, he does not need to be told that he has violated the law. If, however, he is uncertain in his own mind as to the propriety of his reason for changing an employe's status, then the only safe course for him to follow is in consulting in advance his superiors or the company's personnel or legal advisers.

In the long run, the supervisor will find 100 per cent compliance with the Act far less troublesome and far less expensive than taking a chance. Moreover, he will find it far easier to obtain or retain the respect and confidence of his workmen if he keeps "hands off" and does not try in any way to influence their own decisions on union matters.

Careers in Federal Government Administration

By PRESLEY W. MELTON

Chief of the Training Section, United States Department of Agriculture

CURRENT books, periodicals and special reports by college professors and consultants in the field of public administration, political science and scientific management stress the value of training for career administrators in the Federal service. May a training officer in a Government executive department ask and answer tentatively four questions that are fundamental in a discussion of training for administrators and potential administrators?

What is meant by career service? What positions in the Federal career service are "administrative"? What does a Government administrator need to know in order to function effectively? How was this knowledge acquired by those career administrators whose competency is unquestioned by the public, by the political scientists, and by their co-workers in the Government?

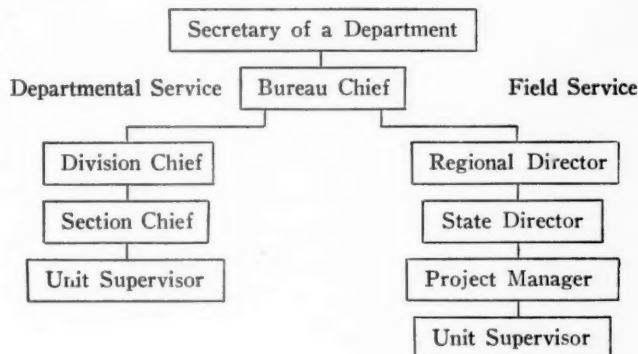
What Is Career Service?

According to Dr. Leonard D. White, Professor of Public Administration at the University of Chicago and a former U. S. Civil Service Commissioner, long years of service is career service only when an employee is steadily advanced to positions of increasing responsibility. I think that Dr. White would agree that this advancement need not involve supervisory or executive authority, and that the number of subordinates who work under his direction is not necessarily a gauge of the employee's value to the Government. The two men in the Census Bureau who invented and developed the punch card machines and tabulating equipment which have revolutionized the science of recording and analyzing statistical data, were not, so far as I know, handicapped by an obligation to oversee the work of subordinates. Neither are many outstanding chemists, physicists, surgeons, lawyers, economists and accountants who serve the Government. Careers often lead up to positions as highly-skilled technicians without supervisory responsibility. However, we are concerned here only with careers in administration.

Secretaries, undersecretaries and assistant secretaries are administrators, but, as a rule, these positions are not filled by promotion from within the career service, and the incumbents rarely hold office through more than one

or two Presidential administrations at the most. A position as bureau chief is usually, but not always, the upper limit of career service in the Federal Government.

Are bureau chiefs and their subordinates "administrators"? Sometimes political scientists are more prone than the general public to underrate the significance of the bureaus and their subdivisions in the executive branch of the Federal Government. Probably most people know the names of the bureaus, but only a few will recognize the departments that employ the following: the weather forecaster, the census taker, the immigration inspector, the captain of a coast guard cutter, the light house keeper, the investigator-special agent ("G-man"), the rangers in national forests and national parks, the engineer who dredges river channels, the reclamation engineer, the topographic engineer, the highway engineer, the public health nurse, and the medical officer for crippled children. The internal structure of an executive department somewhat resembles that of General Motors or the U. S. Steel Corporation, and the bureaus are comparable to operating subsidiaries. Bureau chiefs and their subordinate executives have responsibilities similar to those of the presidents, vice-presidents and department heads of these subsidiaries. Their work includes functions that professors of scientific management define as administrative—formulating and deciding policies as well as the executive functions of direction and control. This is a typical hierarchy of employees with supervisory and administrative responsibilities in an executive department:



There are divisions and at least one section—the Examining Section of the Agricultural Adjustment Administration—that are larger than some bureaus. Small bureaus have only one-or-two-hundred employees; others have more than twenty thousand. The diagram is intended only to outline the most common hierarchy of administrative and supervisory positions.

The record of the Chief of the Bureau of Biological Survey will serve as an illustration of an administrator who came up through the field service. The Bureau's functions include wild life research, predatory and rodent control, law enforcement, administration of large tracts of Government land. The present bureau chief acquired a college degree in biology and entered the bureau in the lowest grade of the professional service. During his twenty years in the field, before promotion to the position of bureau chief three years ago, he was an economic ornithologist, supervisor of rodent eradication, state director, regional director in charge of law enforcement and administrative functions of the Bureau, and Chief of the Division of Wild Life Research.

Also, typical is the record of the Chief of the Children's Bureau in the Department of Labor. After graduating from a university and working for a state industrial commission, she was employed by the Children's Bureau as a special agent twenty-three years ago. She was promoted successively to positions as Chief of the Social Service Division, Chief of the Editorial Division, Assistant Bureau Chief, and four years ago to Chief of the Bureau.

Training in Subject Matter Needed by Administrators

The employee whose work is administrative or executive must be given a broad, general training. It is often difficult for a good man to avoid over-specialization. His superior officers are reluctant to pull him away from a project he is running effectively and assign him to new work where at the beginning he will be of little value. They hesitate to transfer him from Miami to Juneau where he will meet a new set of conditions. Yet frequent transfers are necessary to develop all-around administrators for the Government Service.

The Food and Drug Administration station chief at New Orleans, working in close co-operation with the Customs Bureau, is responsible for the inspection of imports from foreign countries. He is in charge of a large force of inspectors in shrimp canneries. The

Food and Drug station chief at Minneapolis has few imports and no shrimp canneries to inspect. His inspectors and chemists are concerned with other foods, drugs and cosmetics. The station chiefs at New Orleans and Minneapolis must learn each other's work before they can become fitted for the position of regional director, whose headquarters is Chicago.

The Chief of the Food and Drug Administration sees to it that each of his station chiefs is given such training, by transfer to other stations or, where this is not feasible, by special training detail to other field stations and to the Washington office.

The Commodity Exchange Administration is concerned with boards of trade. The manager located at New Orleans must have a thorough knowledge of the buying and selling of cotton on the New Orleans Cotton Board, but for this job he needs to know little about the buying and selling of wheat. The manager at Minneapolis is concerned with the marketing of wheat and does not need to know about the cotton business.

The Food and Drug representative in New Orleans needs no training in the subject matter of the Commodity Exchange Administration, since it is unlikely he will be promoted into the other bureau. However, both bureaus are engaged in law enforcement, and the executives of both, together with those of the Bureau of Biological Survey, Bureau of Agricultural Economics, Bureau of Animal Industry and Bureau of Entomology and Plant Quarantine law enforcement supervisors located in New Orleans—all employees of the same department—might profit by advanced training in assembling and presenting legal evidence in Federal courts.

In general, however, the executive work of the Federal Government is so divided that each bureau is assigned a special function or several related functions to perform. The bureau chief and his subordinate officials are usually subject matter specialists in the same sense that the executives of a bank or a construction company are subject-matter specialists.

Probable Lines of Promotion

There are cases where successful career administrators have served in several bureaus on their way to the top. The career of the Government's administrator of civil aeronautics is an example. He started in the service nineteen years ago as a clerk in the Emergency Fleet Corporation. Before his appointment to the newly-

created Civil Aeronautics Authority he worked for the Department of the Interior, the U. S. Shipping Board, the office of the Alien Property Custodian, the Department of Justice, and the Treasury Department. Thus, it is evident that a Government administrator who has risen to the position of bureau chief need not have served exclusively in a single bureau.

It is possible but unlikely that a division chief in the National Park Service of the Interior Department, or a division chief in the Office of the Comptroller of the Currency of the Treasury Department will become a bureau chief in the Department of State or the Department of War. There is often an easier transition between a Government bureau and a private business than between two Government bureaus performing different functions. A division chief in the Treasury Department may become president of a bank, and I know of several ex-army officers who are presidents of manufacturing and merchandising companies.

Careers Begun Outside the Federal Service

Is it desirable that the career be exclusively within the boundaries of the Federal Government? Dr. John Gaus, Professor of Public Administration at the University of Wisconsin, believes that, because the Federal and state governments are complementary, the careers of administrators are likely to include service in both.

The primary function of the Bureau of Public Roads, for example, is supervising the construction of roads, built in part with grants-in-aid from the Federal Government to state governments. The present chief of the Bureau had a university education as a civil engineer, worked as a civil engineer for a railroad, taught civil engineering in a state college, then became a highway engineer and later chief engineer of a state highway commission. He was appointed Chief of the Bureau of Public Roads nineteen years ago with no previous Federal experience except as a dollar-a-year man.

Dr. Lewis Meriam of Brookings Institution would agree with Dr. Gaus that the record of the Chief of the Bureau of Public Roads is an example of career service. Dr. Meriam points out also that an outstanding career in the public service may include appointive positions in educational institutions, municipal, county, state or Federal governments. Thus the present Chief of the Office of Education was appointed to his present position directly from the superintendency of a large city school system.

Unlike European governments, but like American industrial concerns, the U. S. Government often makes appointments to administrative and executive positions from outside the boundaries of the Federal Service. Most frequently, such appointments are temporary details from private business or universities. The Governor of the Farm Credit Administration, after six years of Federal service, resigned to become the head of the department of farm management and agricultural economics in a land-grant university.

Sometimes, however, administrative positions filled from outside sources are in the permanent civil service. The Civil Service Commission has just selected for a \$10,000 job a Director of Unemployment Insurance in the Railroad Retirement Board. The terms of the civil service examination provided that applicants might come from private corporations, labor federations, universities, state or Federal Government agencies, and required not only a knowledge of the subject matter but also broad and "progressively important administrative experience" in the field.

Training in Scientific Management

While a Government agency, like a privately-owned corporation, profits by occasionally bringing new blood into executive positions, the newcomer is handicapped by his lack of knowledge of those phases of administration that are peculiar to the Federal Service. Basically, administration is itself a science with principles, techniques, and literature that are known to the competent executive whether he works for the Federal Government, state government or a private corporation. However, there are certain aspects of management that an executive in the State Department needs to know which are not needed by an executive in a factory, just as the factory executive uses techniques that would not be applicable in a bank, a railroad, or a department store.

Every executive should be trained in methods of analyzing planning, and laying out a program of work, and here much the same principles apply in a Government division or regional office as in the substation department of a power company. The executive in industry or in Government must know how to make job analyses in order to divide into practicable units the work his agency is expected to perform.

He must know the principles of organization so that he can build up an integrated hierarchy of subordinates

to whom he can delegate authority, and the organization must be adapted to the special functions of the agency. For example, when the Federal Crop Insurance Corporation was set up recently, the president of the Corporation established regional offices at the primary grain centers of the country, rather than having all field offices report directly to Washington as is the more common practice of Government corporations. In general, organization problems of a Government administrator are similar to those of an administrator in industry except that the structure of a Government agency is indissolubly woven into the social-economic structure of the nation.

The executive must know personnel management—the technique of handling personnel on the job. While the legal relations of Government employes and management differ somewhat from those in private industry, essentially the same principles and methods of directing the work of others are effective in a government or private organization.

Training in Public Relations

Even more than the executive of industry, the Government executive must know the informational, public-relations, and co-operative aspects of their jobs. Only a few bureau chiefs during their careers have held functional, public-relations positions where they would acquire this necessary ability. The record of the Chief of the Children's Bureau, who was for a time chief of the Bureau's editorial division, is not as typical as is the record of the Chief of the Federal Bureau of Investigation in the Department of Justice, whose non-technical publications are well known. The functions of the "F.B.I." are well known to laymen and to the general public, although the Bureau is engaged in technical law-enforcement activities. The Chief of the Bureau had two law degrees when he entered his present position fourteen years ago and acquired another degree in law three years ago. He held no functional public-relations position before or after starting his career with the Bureau. Most career bureau chiefs acquire the ability to speak and write fluently and to plan and direct conferences by holding jobs where public relations is a part of their regular work. The chief of the Bureau of Biological Survey had two-hundred and fifty publications to his credit when he became bureau chief.

Fiscal Control and Policy Making

Men who hold administrative positions must be acquainted with the development and use of control records, but here the training which the industrial administrator needs diverges from that of the Government administrator. The budgetary and financial administration of a Government agency is—because of the nature of Government and the interlocking control of the Federal Budget Bureau, the General Accounting Office, and Congressional appropriation committees—quite different from the fiscal control techniques of private industry.

In the realm of policy making and administration, the problems of executives of Government agencies and private business differ considerably. The industrial executive makes some policies, helps formulate some policies, and carries out policies laid down by higher executives and a board of directors. So also does the Government executive, but his board of directors is Congress, whose policies are laws. The Government administrator must be thoroughly familiar with general administrative law and the background of substantive law that form the framework of the agency he operates. He must be well acquainted with the complex procedures necessary for the orderly functioning of Government.

Within the varying degrees of their authority, then, the successful Government supervisors, executives, and administrators are trained, first in subject matter and second in the principles of management necessary for the efficient operation of their bureaus or bureau subdivisions. Now, who is responsible for training administrators?

Responsibility for Training Administrators

Primarily, responsibility for training subordinates rests with higher executives and administrators. It does not follow that the superior officer directly gives his subordinates all the training they receive. In a Government department, the Secretary can spare time to discuss with his bureau chiefs little more than departmental policies. The bureau chief can spend little time teaching his division chiefs and regional directors the principles of scientific management and public administration or the subject matter of their work. Yet these fundamental principles, the project manager, the section chief, the state director, the regional director, and the division chief must know if they are to

perform their current assignments effectively and be prepared for advancement to higher positions.

In some cases the higher administrator makes some definite assignment of responsibility for developing a systematic methodology for administrative training and for keeping the subject active and fully alive to a staff assistant.

In the Office of the Secretary of the Treasury there is an assistant who is responsible for developing efficient administrative procedure, organization, and policies in the subdivisions of the Department. In the State Department there is a director of the Foreign Officers' Training School. In other departments, in some of the subordinate agencies, and in some of the independent agencies there are men assigned to similar duties. Executive training may be all or only part of their work. Usually they are counselors, not instructors.

Training Devices

There are numerous devices in addition to direct instruction that are used effectively to upgrade executive personnel. For example, it is possible to arrange and direct staff meetings and conferences that will result in maximum training effectiveness for the participants. Also, executives may be rotated through different jobs and types of jobs and transferred occasionally to different headquarters in the field and in Washington. In all cases, informal, as well as formal, training must be specifically planned to give executives a thorough, well-rounded knowledge of all phases of the agency's functions, to the end that the organization may give the best possible service to the public.

Executives are usually self-starters and, to no small extent, owe their advancement to their ability to train themselves in the effective performance of their present duties as well as the work of their superior officers, which they themselves may expect to carry on eventually. Thus, the supervisor may find that he needs further formal education, and usually he must get it in evening school or during leave without pay.

The Department of War sends selected executives to schools of business administration for training in the technique of financial control and budget making. Some other agencies follow similar methods, but only a few employees are given postentry educational courses at the expense of the Government. More typical is the record of the civil aeronautics administrator who acquired his A.B. and LL.B. degrees by evening school courses while he worked for the Government.

Unlike an industrial organization, the Government cannot, in the absence of special legislation, spend money for training that does not definitely and specifically increase the efficiency of the employee in the performance of his customary duties. Executives of public and private agencies read widely the literature of management to capitalize on the knowledge of outstanding administrators and economists in the solution of their own administrative problems. Private companies pay the membership dues of their executives in trade associations and management societies. Bureau executives who carry memberships in professional societies pay their dues out of their own salaries. This necessity for self-education is one of the several differences between the training of industrial and Government executives.

BOOK REVIEWS

American Standard Time Series Charts. Prepared by Committee on Standards for Graphic Presentation, The American Society of Mechanical Engineers, New York, 1938, pages 68. (\$1.25.)

This manual briefly but completely covers the subject of chart drawing, particularly line charts. The committee has recognized that charts are only the means of expression, therefore, they have not insisted on complete standardization to the detriment of effective presentation. Emphasis is laid on directing the reader's attention to the chief point of interest of the chart.

Reference to the manual should save much time experimenting to find the proper proportions, ruling, scale designations, line weights, etc. for most effective presentation. Uniformity of charts will also be secured so that the reader will not be confused by differences in chart construction. By BERNARD SHEREFF, Standards Department, American Hard Rubber Company, Butler, N. J.

Collective Bargaining Under the Wagner Act. By David F. Cavers, William Gorham Rice, Jr., Robert H. Wettach, Benedict Wolf, David A. McCabe, Harry D. Wolf, Frank T. deVyver, C. E. French, John C. Gall, Raymond S. Smethurst, J. W. Madden and Dorothy Sells, Law and Contemporary Problems, Volume V, No. 2, Duke University, North Carolina, 1938, pages 175-333. (\$.75.)

The title of this symposium is something of a misnomer. To be sure, most of the papers deal with various phases of collective bargaining in the broadest sense. But three of the ten included in the volume have nothing at all to do with the Wagner Act.

The extraneous nature of some of the material does not detract, however, from its value to labor lawyers, personal admin-

istrators, and students of industrial relations. Each paper makes a worthwhile contribution in the special field that it covers.

In one paper or another there appears discussion of the history of the Labor Relations Act, of significant rulings of the Labor Relations Board, of Supreme Court decisions sustaining the validity of the Act, of the effect of the law on industrial relations policies and practices, and of the relative desirability of amending the statute. Then there is a paper analyzing the methods used for settling industrial disputes in Great Britain. In addition, there are articles on proposed means for enforcing collective labor agreements, on the intra-union control of collective bargaining, and on machinery for adjustment of disputes arising under collective agreements.

In general, the authors seem to be on more solid ground when they confine themselves to exposition than when they engage in argument. Especially useful to those who find it necessary to keep informed on Labor Board decisions are the papers by Professor Rice and by Mr. Wolf. One explains the methods used by the Board in determining who are the representatives of employees. The other summarizes Board decisions interpreting the obligations imposed on employers by the Act with respect to bargaining collectively.

While the other contributors have much to say of enduring interest, some of them advance arguments that may not seem convincing to sceptical readers. Mr. French, for example, laments the tendency of the Act to require employers to use a legalistic approach in dealing with employees. He points out, with good justification, that too often fair employers have been discredited and that the peaceful and mutually beneficial association of employers and employees of many years' standing has been cited as evidence of illegal domination and coercion of employees. Yet, he goes on to quote a former regional director of the Board as saying: "No employer who has developed and maintained an intelligent program of personnel administration, has ever been hailed (sic) before the Labor Board."

The position of the National Association of Manufacturers, on amendments to the Wagner Act, is ably set forth by Messrs. Gall and Smethurst. They express the view that organized labor has not demonstrated any real disposition to correct its abuses in recent years, and maintain that the imposition of legal restraints on labor organizations should go hand-in-hand with governmental encouragement of a strong labor movement. Whether or not their basic thesis be sound, they have presented a strong case for the adoption of amendments to lessen the complications for employers who are now forced to deal with labor organizations that have sometimes shown themselves to be something less than thoroughly responsible.

J. W. Madden, Chairman of the Labor Relations Board, presents a highly ingenious argument in opposition to so-called equalizing amendments. In so doing, he sets a trap that might conceivably be sprung on him and his associates. In suggesting that industrial conflict always presents difficult problems of policing and contending that the prevention of coercion from any source would require a gigantic federal police force, Mr. Madden seems virtually to admit that the Board now has more power than it can effectively exercise in preventing coercion by employers. Whether the Board confines itself to judging the motives and the conduct of tens of thousands of employers and their supervisory forces, or whether it undertakes the same task for millions of employees, the community is at the mercy, to

quote him directly, "of the judgment, good or bad, of the authorities which have the policing in their charge." By RUSSELL L. GREENMAN, McKinsey, Wellington & Company.

The Cost Principle in Minimum Price Regulation. By Herbert F. Taggart, Michigan Business Studies, Volume 8, No. 3, University of Michigan, Ann Arbor, 1938, pages iv, 182. (\$1.00.)

After the ill-fated NRA experiment, many business men and government officials have sought to forget the experience, although many of the motives leading to NRA persist. Professor Taggart, by carefully studying the development of minimum prices under the NRA has greatly contributed to an understanding of the difficulties of enforcing the no-sales-below-cost legislation which has spread throughout the country following the demise of NRA.

As a panacea for the irritations of price competition there has been much agitation for state laws forbidding sales below cost. This study of Professor Taggart's shows in detail the technical difficulties of defining costs for such a purpose. It considers the problems involved in formulating such rules, the mechanics required for their implementation, the elements of cost entering into minimum price formula and the complicated problems of applying such formulae. Cost accountants have long recognized that costing serves management best when it is not used solely for the purpose of determining price. The thoroughgoing analysis of Professor Taggart again supports this judgment of the cost accountants.

Management can gain real benefits by studying the experience of NRA as it has been interpreted in this work. In their desire to escape from certain hazards of price competition some business men are imploring legislators to enact laws which only serve to increase the amount of regimentation that business men deplore. By E. JOHNSTON COIL, Director, National Economic and Social Planning Association, Washington, D. C.

Accounting Principles for Engineers. By Reitell and Vansickle, McCraw-Hill Book Company, New York, Second Edition, 1936, pages viii, 518. (\$4.00.)

Engineers in production and executive positions are desperately in need of a knowledge of accounting. If the title of this book attracts engineers and exposes them to such accounting as is contained therein, well and good. Some accounting is better than no accounting. If this title causes engineers to study this text instead of one more worthy, injury rather than good results.

As with the majority of accountable books, the purposes of the technique are badly neglected. Apparently the student is expected to memorize a technique on the authority of the authors; first that the technique is useful, and second that the authors' version is the correct one. Certainly little is done in this text, or in many other accounting texts, to prove to the student the usefulness of the technique he is learning, or to give the student reasons for the methods presented. Along with many predecessors, Reitell and Vansickle allege that accounting earns its way as a tool of management, without considering either what man-

agement wants of this tool or whether the tool is well adapted to its purposes.

On the whole, this text is a simple description of the accounting process written on a level that should avoid over-extending freshmen. Naturally, critical analysis of controversial points would be out of harmony in such a setting. For example, the authors place the onus of determination of the method of depreciation to be used upon the engineers—the very audience to which the book is addressed. But the treatment of depreciation is an emasculated, oversimplified description of most of the more usual methods. There is not a word of evaluation of the several methods; nothing to indicate the circumstances under which each method applies; nothing to help the poor engineer meet this difficult task assigned to him by these disappointing guides.

Adaptation to the needs of the engineer has been sought through omission of most of the standard elementary material on proprietorship; and by a more detailed treatment than usual of inventory, expense, equipment, and payroll controls. Indeed, these chapters are much the best in the book and are entirely worthy elementary treatments. The adaptation to the special audience might well have gone further through the elimination of the needless tedium (for engineers) of Chapters XV and XVI on columnar journals and control accounts, and the useless waste of time of Chapter XXIII on code classification. This might have enabled expansion of the last chapter on "Dynamic Uses of Costs," in place of the present four page pep talk naming some of the uses but without assisting the student toward realization of the values there claimed. Certainly such a topic should show some acquaintance with differential concepts of cost, wholly neglected by Reitell and Vansickle. Unfortunately, it is just this cost concept which is most needed by both engineers and business men.

There remain a number of technical objections to the material presented. The discussion of reserves and funds fails to show a realistic appreciation of the nature of such items. Thus (page 142) the treatment of reserve for plant betterments recognizes the trade of cash for fixed assets, but follows this recognition with "After the betterments have been made, the purpose for which the Reserve for Plant Betterments account was created has been accomplished. After this has been done, there is no further need for the reserve account. The surplus so appropriated should be returned to the free earned surplus. . . . But such returned "free" surplus is not free; it cannot be distributed to the stockholders as dividends unless the plant betterments are distributed!

This confusion of reserves and cash is common among both engineers and academic accountants. On page 143, a similar sin is committed: "The necessity for special fund reserves is to insure the reservation of a sufficient amount of surplus to make sure that special funds may be set aside from the general cash." Such reserves do no such thing. They merely increase the proprietary interest designated as "permanent" by appropriating earned surplus. This may indeed take the form of retained cash funds—or it may take the form of increases in idle real estate, or any other conceivable asset. Conversely, cash for a fund may be accumulated from earnings without the setting up of reserve accounts. It may even be accumulated in the absence of earnings appropriable for such proprietary reserves. As plant and equipment wear out, cash tends to accumulate, if the

business does not reinvest it in other assets or does not operate at a loss. Mere recovery of depreciation expense in the sales price will enable the accumulation of replacement funds or of sinking funds for debt retirement.

The analysis of accounting statements from page 164 to 171 is more enlightening as to the purposes and uses of accounting than the bulk of the volume. But, in common with most accounting treatises, its treatment of statement analysis is grossly inadequate if not downright erroneous. For example, on page 169 this appears without qualification: "The prosperity of the business varies in direct proportion to the turnover of net working capital." A high turnover of net working capital may mean a desperate need for more cash; companies financially unable to take advantage of purchase discounts are likely to have a very high turnover of net working capital. And, suppose net working capital was zero, the authors' rule of direct proportionality would give an infinite profit on a very modest sales volume!

The discussion of valuation leaves much to be desired. The treatment of "cost or market" valuation of inventories is naive in the extreme. In spite of discussions in such standard works as Kester's, Paton's, and Canning's, the possible varieties of costs and of markets are ignored, and the rule stated as if it were definite whereas it is highly ambiguous. Having argued for this conservative rule, the authors investigate the effects on calculated profits of departures from their approved rule and finish with (page 200): "But the important thing is to state the net profit accurately each year." They apparently do not realize that "accurately" is not compatible with a deliberately injected bias toward "conservatively." However, a page of quotations from Montgomery as to possible "exceptions" to the rule of cost or market does much to redeem the discussion.

The discussion of overhead as an element in the cost of constructed fixed assets (page 211) is exceptionally sound, for an accounting text, until damned in the final paragraph: "Even though no overhead expense be charged to assets constructed within the plant, a fair amount may be estimated and added to the material and labor cost to ascertain whether or not it would be cheaper to buy than to construct within the plant." They have previously ruled that overhead is not to be charged such assets unless production is impeded or factory overhead actually increased. It should be obvious that overhead should not be added in deciding whether to buy or make except under conditions in which they favor charging it to the asset on the books of account.

Finally, the authors have the innocent attitude of many cost accountants toward costs. Costs are not widely recognized as conventions rather than facts, and these authors fail to so recognize them. For example, on page 372 this appears: "If the freight charges are arbitrarily added to the purchase price of raw materials of this nature (mixed lots of small items), unit prices are but estimates." Unit prices are always estimates; always matters of opinion and convention. Fluctuating prices, quantity discounts, etc., take care of that. And, omission of part of the "true" cost surely will not make a unit price less of an estimate. The practice advocated may not be bad, but the reasons given are; and these reasons betray a wholly unwarranted attitude toward the nature of computed costs.

The engineer still is desperately in need of training in accounting and costing. He should, by all means, study some elementary text; it makes little difference which one. The present

text, *Accounting Principles for Engineers*, is little better or little worse than most of the others. But any accounting text should not be swallowed uncritically by the engineer. He should go on to such more analytical and logical studies as Clark's *Economics of Overhead Costs*, or if this proves too difficult, Grant's *Principles of Engineering Economy*. By BILLY E. GOETZ, Instructor, Armour Institute of Technology, Chicago, Illinois.

The German Civil Service Act, translated, with an introduction by James K. Pollock and Alfred V. Boerner, Jr. The Civil Service Assembly, Chicago, 1938, pages 54. (\$1.75.)

Civil Service Agencies in the United States: a 1937 Census. The Civil Service Assembly, Chicago, 1938 (Pamphlet No. 11), pages 55. (\$.50.)

The New German Civil Service Act of January 26, 1937, is, as Professor Pollock suggests in his introductory explanation, in many respects the most advanced public personnel code in the world, and as such deserves thoughtful study by all persons interested in personnel administration. Let it be added at once that the draft of this code had been completed under the republican regime, which was almost prepared to promulgate it when the Nazis came to power. It will be easy for the informed reader to recognize those parts of the law which represent the accumulated wisdom of a century and a half of a merit system. There is not room here to discuss the elaborate provisions covering the duties of officials, appointment and removal, security of tenure, termination of the official relationship, maintenance, and other aspects of a personnel program. The Nazis have added two elements: by their subordination of the role of the German states, they have made what would otherwise have been a federal code a national code, bringing under its scope the entire public personnel of the Reich. And, by inserting an "Aryan" clause, providing for the dismissal of married women, requiring an oath of loyalty to the Fuhrer personally, and making the civil servant subject to the discipline of the Party as well as of the statutory disciplinary court, they have given the code a twist which makes it unacceptable as a model for democratic countries. It is profoundly interesting, however, that the momentum of a century has carried into the present revolutionary regime, impelling it to adopt the code at all. As Professor Pollock says, "one is left in some doubt whether the Nazi Party or the bureaucracy has come out on top." It will be equally interesting to see what happens to the code if there is ever a change in the regime.

The census of public personnel agencies gives the most complete figures yet assembled as to the extent of the merit system in the federal, state, county, and city governments of this country, and in special districts. Tables list by name all jurisdictions having a merit system, giving its legal basis, and method of administration. No attempt is made to appraise the effectiveness of the agencies, and many of them are admittedly not effective; but on the whole, the picture is decidedly encouraging, particularly in the recent acceleration of growth of the merit system which it portrays. By CHARLES S. ASCHER, Committee on Public Administration, Social Science Research Council.

Introduction to Industrial Management, 2nd Edition. By Franklin E. Folts. McGraw-Hill Book Company, Inc., New York and London, 1938, pages xiv, 566. (\$4.00.)

The book is just what its title implies but the treatment of the subject matter and its scope is such that it should be of interest to those who have had considerable experience in the field of Industrial Management.

While the book is primarily, as the author states, intended as a classroom text, the presentation and discussion, with actual case examples, of such data under chapter headings "Job Standards and Wage Payment," "Job Security," and "Personnel Relations" makes the book a timely one and of value to those now in positions requiring them to render decisions upon these phases of industrial activity.

For those who desire a broadened survey of the field of Industrial Management, the book has been admirably set up. The three main divisions (1) Economics of Production, (2) Factors of Production, and (3) Control of the Production Process carries the student along a course of study well correlated. Each subject is presented from the general viewpoint followed by illustrative case examples taken from the experiences of various Industrial Plants. To further stimulate thinking upon the data presented, each problem is followed by a series of questions formulated to bring out the facts needed in each case to enable the making of a decision.

However, the one weakness, if it may be called such, of the book is the fact that the author at times leaves the case example data somewhat incomplete thus making for ambiguity with regard to the solution of the problem presented. It is felt that if a case example is presented the actual decision made should be given and its merits and demerits then discussed.

The arrangement of data and indexing are such as to aid one in using the book as a reference text. The average reader may desire additional help by being referred to collateral reading. A bibliography at the end of each chapter would be of help.

The subject material presented, the author's style of writing, and the arrangement of subjects makes this book interesting and informative. By FREDERIC OAKHILL, Plant Engineer, Bauer & Black, Chicago.

Hugo Diemer

(Continued from page 35)

colleges and served actively in many professional societies. He was the author of a standard and widely used text on *Factory Organization and Administration*, as well as other books on management, foreman's training, and personnel administration. He was, up to the time of his death, active as Lieutenant-Colonel in the U. S. Army Reserves in their preparation in military preparedness.

Colonel Diemer earned the respect due an active and able man who never shirked a duty and never flagged in his zeal for his profession. He is mourned by a wide circle of friends and associates who have enjoyed his kindly fellowship and benefited by his unfailing willingness to be of help.